

## Scattering Exercise

This exercise may be done with a calculator or a short computer program of your own (if you took Chem 210, Mathematica will do well).

Consider the arrangement of identical scatterers shown below. You are to solve for the diffraction amplitude and phase of the diffracted ray that results from the scattering. The incident ray travels along the  $(1,0)$  direction, and the diffracted ray you should solve for runs to the right, along the line perpendicular to the line connecting scatterers 2 and 3. You may assume that the scattering strength of each scatterer is always 1.

